Manifesting Meaning
Using landscape to reveal process and transform perceptions of Nature

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Fig. 0.1 Timeline of scientific, political, artistic, architectural, and landscape architectural events supporting this research.
Part I: Introduction

“…only the symptoms are being dealt with, while causal cultural foundations – the social structures that underlie dualism, alienation, domination, and estrangement – are ignored and unchanged, if not actually upheld.”

James Corner

1
While sitting amid the noon-time crowd of Washington Square, I was surrounded by the awkward small talk of office workers on lunch break, the gleeful shrieks of children running defiantly from their mothers, the dim hum of traffic beyond the hedgerow, and the chatter of squirrels laying claim to a half-eaten sandwich. As I sat digesting my lunch, my perception of the surrounding spectacle began to slip away – or more accurately, it began to shift. I became acutely aware of the ancientness of the soil which supported me; soil which had been broken down and enriched over thousands of years, whose original source was extraterrestrial. At this same moment, it supported not only me, but the countless bacteria and insects which lay concealed underneath its verdant cover, engaged in the cycles of birth, death, and consumption that allowed for the soil’s fertility. The roots of the London Plane Tree whose shadow I had been taking advantage of also drew its nutrients from this rich, black mat; itself most likely a transplant from soil somewhere outside of the city, grown from stock whose genes had been cultivated and narrowed over centuries. Juxtaposed between another Plane Tree and several oaks, its physical position was the result of a culmination of human interventions beginning with the decision to found the city between the shores of the Schuylkill and the Delaware River (itself a conclusion founded on years of natural processes) and William Penn’s designation of this particular area as a public square.

What was my connection to these timelines which had progressed through the millennia to intersect in this slice of existence? The tree was no longer an object which provided shade, but was instead the current manifestation of years of natural selection, human choice, and relationships to other entities. Likewise, I was no longer an employee on his lunch break, but was the product of a long history of natural processes and human decisions set in an environment which was a physical expression and record of innumerable relationships.

Such realizations stand out in part because they exist in direct opposition to prevailing object-based and consumption oriented views of the world as facilitated by contemporary culture. This popular experience ignores the ways in which environmental processes and humans’ collective actions shape our physical world. It deters a more accurate description of the world as composed of changing interactions, relationships, and active processes. Threats such as global climate change, depletion of natural resources, and loss of biodiversity are increasing the urgency and need to understand our extended impacts. Media attention and public awareness regarding environmental issues has increased, but this awareness cannot restructure our understanding at the personal scale. The way in which people see their surroundings – as a resource, as an indulgence, or as a utility – is inadequate. While attempts are made to remedy environmental crises with new technology and best practices, these solutions are merely treating the symptoms.
Opportunities for reconnecting with Nature’s deep time and networks of relationships are not readily found in everyday interactions with our landscapes and buildings. It is through such opportunities, however, that a comprehension and connection can be engendered of this extensive, causal, and unpredictable Nature. Just as the land artists of the 1970s charged their work with subverting cultural norms, so can landscape design begin to stimulate a more powerful and positive way of conceiving of Nature. As Catherine Howett has stated in her essay exploring opportunities for a new landscape aesthetic, “We must begin by thinking, talking, struggling together to see in fresh ways … We must design new kinds of places, landscapes that body forth our understanding of the astonishing complexity, fragility, and beauty of the world and celebrate the new, more caring and loving relationship into which we wish to enter.”

It is clear now that humans do not merely impact their environments, but are wholly entangled in them as contributors and receivers. Landscapes which reveal and engage people in this everyday entanglement can communicate the powerful and sublime Nature, supplanting objectified views of the world. The question proposed here is of how we can design landscapes to alter the interaction between humans and their environment, therefore promoting new interpretations of our place within our environment.

The Symptoms

In his 1997 essay, *Ecology and Landscape as Agents of Creativity*, James Corner asserts that “…only the symptoms are being dealt with, while causal cultural foundations – the social structures that underlie dualism, alienation, domination, and estrangement – are ignored and unchanged, if not actually upheld.” An examination of current policy and action regarding environmental degradation supports the first part of Corner’s claim. It is commonly understood that our planet is experiencing an array of environmental problems. Articles regarding climate change, deforestation, and overpopulation lie peppered amongst news of political scandal, celebrities, and terrorism; discussions regarding environmental issues have become mundane. There is an active awareness and concern for these crises, yet it is clear that the problems keep getting worse: “A September 2009 study [stated] that business as usual would lead to a 4.5 degree Celsius increase by 2100, and that even if all countries stuck to their most ambitious proposals to reduce greenhouse gas emissions, temperatures would still go up by 3.5 degrees Celsius. In other words, policy alone will not be enough. A dramatic shift in the very design of human societies will be essential.”

While these issues are the symptoms to which Corner refers, they are not usually understood as such. For example, the wide-spread alarm regarding ozone depletion in the 1980s led to a ban on chlorofluorocarbons (CFCs), the main culprit, by 1996. The release of
CFCs has largely been eliminated, but the unpublicized effects of their large-scale use will continue to be seen for at least another 40 years while new threats are brought into popular focus. Other issues which have recently been highlighted, such as oil dependency, have encouraged designers and engineers to imagine ultra-efficient transportation methods and new ways to incorporate alternative forms of energy. These reactionary models are revealing of the way symptoms are confronted as singular problems rather than indicators of a larger dilemma.

As history reveals, recurring mistreatment of Nature can culminate in the collapse of entire civilizations. In these failed civilizations, it was not an ignorance of erosion, crop failures, or loss of natural resources which started their paths to collapse. Rather, it was an inability to identify them as symptoms and take appropriate action – limiting their consumption, expansion, and/or misuse of resources. The same challenge is presented today with new symptoms. The occurrence of global climate change, ozone deterioration, and other hazards does not stem from a discounting of environmental value or even an ignorance of these events. Environmental symptoms are pressing our need to bring attention to the root; a cause which, as James Corner suggests, lies in a culturally constructed view of nature.

The Cause

As the symptoms continue to worsen, the “causal cultural foundations” to which Corner refers, have yet to be treated. Through the agent of culture, “dualism, alienation, domination, and estrangement” have changed the ways humans see Nature. In his 1994 book, *Green World, Gray Heart*, Robert Thayer shows how these manifestations of separation are upheld in cultural views of Nature. He notes that both loggers and the environmentalists who subvert their efforts experience a form of topophilia towards the forest. The former, according to Thayer, may experience this in response to the forest’s position as an economic generator. The latter defends the forest based on their reverence and perhaps a spiritual connection. Clearly the two groups differ in their constructs of Nature, one having an anthropocentric view and the other an ecocentric view. These constructs which help direct perceptions of the forest do share one similarity: both the loggers and environmentalists have objectified Nature.

In either of the above views, Nature is something which is separate from humans and can be commodified. The loggers have deemed Nature as an economic resource which can be exploited and given a quantifiable value. While also separating themselves, the environmentalists have made Nature a cultural resource and have given their definition of nature a priority over the endeavors of humans. James Corner outlines this same problem in “ecological resourcists” (while more benign than Thayer’s loggers, both borrow
from the same constructs) and “ecological restorationists”. He states that “in their dualistic objectifying of the world, both ecological resourcism and restoration are ameliorative at best, and facilitating of exploitation and exclusionism at worst.” 9 Both views are unsatisfying and obscure the understanding that Nature is the complex set of interactions which weave through life, molding relationships and transforming physical materials. As Corner goes on to stress, “Whether the locus of environmental concern be nature or culture, the problem is the belief in a controlling instrumentality and a failure to recognize bioecological constructions as cultural ‘errors and fantasies’ – as treasured fictions that have profound agency in the unfolding of life-worlds.” 10 Humans are equally embedded in the bioecological world and are only separated from it through cultural constructs which support ecocentric or anthropocentric views.

Dualism, alienation, domination, and estrangement have not only separated humans from Nature, but have also perpetuated a sense of remoteness. Areas where Nature can be seen with the least evidence of human interference have become known as the most valuable forms of nature, while nature in urban centers and communities is seen as an amenity or a less valuable mirror of the untamed areas outside of the city:

   City and country, nature and culture, are opposed. We move through cities differently, with a different set of values, whether articulated or not. Consider just one small example: Even the most jaded urban dweller may hesitate to sully the environment around him when he perceives it to be something other than a product of the human community. Though we have all seen trash in a national park, we suspect (or at least hope) that there is a kind of hesitancy that occurs with a person wondering what to do with her candy wrappers on a trail in Yosemite. On the other hand, a visitor to my home, Greenwich Village, will usually not think twice about tossing his cigarette butts on the ground as he walks toward his next destination. 11

Andrew Light points out that the concept of city as not-Nature leads to a gross distancing between people and Nature. In encouraging a view of the Nature in the city, we would be encouraging a respect for Nature in the “country” as well as in those areas that are “a product of the human community.” Arguing for this, Light states that it has become increasingly important that we find ways “of ‘doing nature downtown,’ so as to make the city ‘more natural, making it a place where one can find and commune with nature without,’ in Leopold’s own despairing phrase, ‘loving it to death.’” 12 With fewer and fewer places left in which Nature is revealed, most contemporary cultural constructs have compounded the conception that the human world is tangential to that of natural systems. 13

Culture has solidified the view of Nature as separate, under human control, and strange. While culture has propagated this view, an increasing number of symptoms have developed which indicate that this separation from and misunderstanding of Nature are at the root of the problem. With the symptoms continuing to intensify, the avenues for addressing the cause must be investigated.
Addressing the Cause Through Landscape

Culture can be described as a multi-faceted amalgamation of “values, beliefs, customs, traditions, symbols, norms, and institutions – combining to create the overarching frames that shape how humans perceive reality.” The seemingly unstoppable political, media, and economic power structures which shape cultures are daunting in their influence over our general perceptions. Designers, however, are in a position to contest these institutions, just as artists have contested social structures, political reasoning, and the artistic norms which have characterized their own field. As designers are involved in shaping the interaction between humans and their environments, they are in part responsible for the stories which are told by these spaces. Utilizing this opportunity, some designers have enrolled temporal landscape processes and relationships in telling stories which convey unique conceptions of the Natural world.

In the role of story-teller, designers have a specific opportunity to unveil insights about the world. Tim Ingold explains this opportunity in his essay *The Temporality of the Landscape*:

> Telling a story is not like weaving a tapestry to cover up the world, it is rather a way of guiding the attention of listeners or readers into it. A person who can ‘tell’ is one who is perceptually attuned to picking up information in the environment that others, less skilled in the tasks of perception, might miss, and the teller, in rendering his knowledge explicit, conducts the attention of his audience along the same paths as his own.

Most well known, land artists in the late 1960s into the 1970s departed from traditional sculpture and utilized their story-telling opportunity to attune others to the site-specific processes in their work. In her 2000 essay, *The Post-Earth Day Conundrum*, Elizabeth Meyer traces the emergence of contemporary landscape architectural trends from the work being done by these early sculptors (like Smithson, Irwin, and Morris) who first began responding to the latent Natural qualities of their sites. The artists of this time “employed formal presence to focus attention on a place and its particular qualities – its ancient natural histories, its deep time, its recurring natural cycles and processes – that were almost invisible to a culture of distraction and disengagement.” By allowing natural histories, deep time, and processes to express themselves, the work of these artists served as useful and inspirational precedent for landscape architects looking for new ways to “tell” and create meaning in the landscape.

In the 1980s and into the 1990s, landscape architects like Michael Van Valkenburgh and George Hargreaves began drawing upon this earlier work and contemporary writings on phenomenology. In her review of the landscape architects of this period, Elizabeth Meyer writes that, “these designers created designed landscapes that operated as focusing lenses for knowing the natural world, that
instigated aesthetic experiences, that reduced barriers between humans and the natural world, and that functioned as physical catalysts for changing social rituals affecting the natural world.” 18 These designers not only incorporated concealed processes, but they employed them in their creation of explicitly experiential and aesthetic works in order to change the social relationship with Nature.

Given the malleable and regenerative properties of landscapes, it has been the primary medium in which work has sought to manifest Natural and ecological meaning. This is not to imply that there have not been works of architecture which also seek to engage users through stories which highlight underlying processes. For example, David Leatherbarrow writes of Todd Williams and Billie Tsien’s Neurosciences Institute in La Jolla, California:

> The aim of the representation is to discover relationships and affinities that were previously unsuspected. This is accomplished in a number of ways: the introduction of materials that are without precedent in the area, the ‘misuse’ of those that are typically found there, the dislocation of elements from their typical positions, and the disturbance of existing topographical formats… the most obvious outcome of these techniques is a certain defamiliarization, or the creation of a certain remoteness within the building and landscape, a distance that intends to prolong that of the landscape. 19

The architects have revealed through material treatment and experiential performance a story of deeper time along with contrasts which highlight the given properties of a site and its relationship to the built work.

By creating new dynamic experiences and interpretations of a site, these designers have not only utilized ecological principles in the creation of meaning, but have created narratives which give users the opportunity to perceive these principles. As these artists have shown, it is through such opportunities that the dominant cultural views of Nature can be addressed. Despite a focus on ecological narratives, designs of this period relied primarily upon overt intentionality in creating statements that were set aside from our ordinary interactions and experiences. However, in order to provide narratives which relate Nature to our everyday environments, there should be a focus on how these narratives are read in regular interactions with landscape. The question now is how the un-designed and indeterminate wild of Nature can be framed to engage and reveal, ensuring that these stories are ‘narrated’ and ‘read’, and for new perceptions and conceptions to be stimulated. 20

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1 Corner 1996, p. 93.
2 I will take up James Corner’s separate definitions of the cultural “nature” and the “Nature” which precedes cultural definition: “The first, ‘nature,’ refers to the concept of nature, the cultural construction that enables a people to speak of and understand the natural
world, and that is so bound into ecological language; the second, ‘Nature,’ refers to the amorphous and unmediated flux that is the ‘actual’ cosmos, that which always escapes or exceeds human understanding.” Corner 1996, p. 84.

3 Howett 1987, p. 11.
4 Corner 1996, p. 93.
5 Assadourian 2010, p. 5.
6 National Geographic.
7 For example, the Easter Islanders, the Roman Empire, and the Mayan Empire; see Wright 2004.
10 Ibid, p. 93.
11 Light 2003, p. 44.
12 Ibid, p. 61.
13 See also Spîn 1984; Spîrn 1998.
16 Meyer 2000, p. 196.
17 Christian Norberg-Schulz was primarily responsible for bringing phenomenological writing into the architectural discourse; see Norberg-Schulz 1980.
19 Leatherbarrow 2004, p. 50.
20 In my use of “wild”, I am referring to the aspect of Nature which is not completely comprehensible, yet we still know it to exist – impossible to design, it is the characteristic of Nature which is beyond human control. It weaves through all life, molding interactions and transforming physical materials.
Part II: Engaging the User

“...the main focus of my work is the direct experience of the individual viewer – trying to give a place an emotional content.”

Mary Miss ¹
Culture’s Languages

While the stories of designers may convey any number of insights into the perceptions of their teller, no story exists in a vacuum. As Corner, Thayer, and others have noted, culture has crafted the prevailing stories through which Nature is understood. In its role as the catalyst for environmental problems, culture has ‘muffled’ Nature – subduing perceptions of Nature’s wildness: “Even though it is the demise of earthly forests that elicit our concern we must bear in mind that as culture-dwellers we do not so much live in forests of trees as much as in forests of words. And the source of the blight that afflicts the earth’s forests must be sought in the word forests – that is, in the world we articulate, and which confirms us as agents of that earthly malaise.” 2 Neil Evernden notes that the source of environmental problems can be found in culture – the “forests of words” which permeate our lives. 3 If culture is upheld and conveyed by humans through language, then it is with new languages that we might be able to re-engage people with Nature and re-articulate the word forests.

Whether it is written word, the sciences, or art, languages initially develop from the perceptions of an individual. In his 1977 essay, Notes Towards a Model, Robert Irwin outlines the process through which our perceptions of the world become abstracted (see Fig. 2.1). 4 Beginning with the initial perception, Irwin explains that in the pursuit of making a personal perception and conception of the

![Fig 2.1](image)

Irwin’s process of compounded abstraction (from left to right): reality, perception/sense, conception/mind, form/physical compound, formful/objective compound, formal/boundaries and axioms, formalisms.

world known, one must somehow make it physical. In this way, the physical creation is always a re-presentation which can never fully encapsulate the original experience. The physical expression may then be repeated and compounded as a norm. Finally, through habitual use, these norms of expression become formalisms which act as a reference for individuals, allowing us to save time by
consulting a pre-established construct instead of relying on our own conception of a situation. As Irwin explains, these cultural languages are often inadequate representations of reality: “...throughout history, in one way or another, we have compounded our reality into a formalized version, forcing the ephemera of nature into predetermined frameworks.” 5 Dynamic, transient, and wild qualities cannot be captured in these static frameworks of abstraction. The final formalism is so far removed from the perceptions of the world from which it originated that it runs the risk of folding back in on itself, or as Irwin writes, “our inquiry, experience, experiment, argumentation, and criticism begin and end with their established formalism.” 6 We rely completely on these formalisms, forgetting to look towards our own perceptions and enforcing a view of a static and objectified nature.

Clearly, many discoveries and new understandings have evolved through the use of these languages. The problem arises when we discover that a language is somehow disregarding or not adequately expressing an important conception of the world. When addressing the issue of the norms of sculpture, Rosalind Krauss states that “every language has its own structure that cannot be criticized from within. For critique of a language there must be a second language that deals with the structure of the first, but possesses a new structure.” 7 Upon realizing the inadequacies of an abstracted formalism, a new language is demanded. In the case of contemporary culture, it is the object-oriented character of languages which stands at the root of environmental problems by severing objects out of their rich field of dynamic connections.

When looking at the work of the land artists of the 1960s and 1970s, it becomes clear that their projects eschewed traditional languages in favor of a new form of interaction and creation of meaning. Unsatisfied with the limitations of the formalisms and typologies present in painting and sculpture, these artists sought ways to encourage new perceptions of our environments. As Marc Treib notes of Irwin, his dissection of the process of abstraction led him to revert to the first steps in the procedure: “Irwin feels strongly about the necessity to create works that allow, indeed coerce, the individual to feel and think for him or herself. Thus, his mature projects focus on how we perceive rather than on any particular object of our view. To him, the subject of the artistic enterprise is ultimately human consciousness and how we come to terms with our consciousness in the world.” 8 The objection of these land artists was towards a set of languages which did not allow them a proper articulation. In response, they created a language which allowed them to truly engage the user; a language of experience and aesthetic. It is this language which might be adopted by designers who wish to connect sites with their users and challenge conceptions of Nature.
From Land Art to Landscape Architecture

The language used by designers in telling stories is not static. As Irwin asserts, it is through the habitual use of specific forms that a language is created. By injecting new forms of meaning and questioning others, a language may be added to or transformed. The phenomenological language of the land artists discussed above is distinct from the frameworks most often utilized by landscape architects and architects, yet it offers a strategy of creating meaning which would make a useful injection into the language of landscape architecture. Mary Miss has made the distinction between her craft’s language and that of landscape architects and architects:

What makes me different than an architect or landscape architect? I’m not sure except that the main focus of my work is the direct experience of the individual viewer – trying to give a place an emotional content. Just because of the complexity of building needs today, I think it is difficult for architects to spend much time addressing these needs. But many artists are interested in entering these situations, dealing with pragmatic concerns, making art that can also be functional.  

Mary Miss claims that the spaces created by landscape architects and architects cannot (or do not) offer an experiential and emotional understanding of a site due to a focus on function. The requirement of landscape architects which is not shared by artists – function – presents two problems for incorporating the language of the land artists. First, the ideal of function must somehow be reconciled with the perception-changing goals of the experiential and aesthetic language. Second, the expectation of our landscapes to be functional has limited the user’s anticipation of meaning to be conveyed in their everyday landscapes.

Mary Miss sees the issue of function as a decisive characteristic. When speaking of this difference between the professions, however, Miss refers to the experience of the viewer and the emotional content of the site as “needs”. Indeed, there is no reason why the narratives told by art cannot serve as a functional aspect of the landscape. Robert Irwin has noted, “All art is experience, yet all experience is not art. The artist chooses from experience that which he defines out as art, possibly because it has not yet been experienced enough, or because it needs to be experienced more.”  The function of this art is to create an experience that is somehow deemed necessary by the artist. To create an experience that more thoroughly exposes under-appreciated qualities can positively add to the language of landscape architects in order to stimulate new, beneficial perceptions of Nature.

The stories experienced in the work of Robert Irwin, Robert Smithson, Mary Miss, and others have most often been about the processes and qualities of a site which are not readily understood or seen. Their language seeks to act as “focusing lenses” of the natural world.  When adopted by landscape architects, however, these narratives of Nature can become woven into the daily interactions of people
and space. Mary Miss asserts that it is because of the “complexity of building needs” that landscape architects are unable to address the issues of experience and emotion. This complexity, however, is an opportunity for the landscape architect, who by necessity must deal with the complex and dynamic qualities of Nature. John Beardsley has examined the difference between these three disciplines from a different perspective, stating that “if... painting and sculpture aspire to what critic and historian Michael Fried once called ‘presentness’— the condition of being fully observable in an instant—and if architecture strives for some measure of permanence, then landscape architecture, in contrast, struggles to embrace the dynamic.” 12 While land artists sought to reveal ephemeral and sometimes dynamic processes of landscape through “presentness”, landscape architects can influence the daily narratives and repeated interactions of people and place, giving them the opportunity to reveal the ways users tie into these complex processes. When adopted by landscape architects and architects, the language of the land artists can serve to not only underscore the invisible forces of a site, but can also serve the function of revealing the ways that users are embedded in these processes of Nature.

The requisite of function in landscape architectural projects also creates a second problem for the incorporation of an experiential language. When viewing a work of art compared to a work of landscape architecture, there is a disparity in the ways the works are perceived. A viewer caught in the experience of an artist’s intervention assumes that the piece was created to mean and thus the meaning is actively sought. Whether or not the work has a literal border, it is framed by the perceptions of the viewer in their knowledge of a work’s intentionality. Landscape architectural works are often assumed to serve functions – social facilitation, ecological purpose, or recreational utility – while the function of meaning is not often sought. In order for narratives of Nature to “read”, they must somehow be framed.
Intentionality and the Affective Frame

In his 1993 essay, *The Hidden Structures of Art*, Robert Irwin analyzed the orthodoxy of the frame and the mark. Stating, “one look around tells us there are no such frames in our perception of the world. And as to the marks we make on our canvas, they acquire their special significance by virtue of being seen as intended – as opposed to something accidental or found, a scratch or a blemish.” Through this orthodox, the mark is recognized as *intentional* and therefore gains significance. Irwin has through his work questioned the idea of the frame as a social construction, aiming instead to throw the responsibility of interpretation and perception back on the user. In *Tilted Planes*, an unrealized concept for The Oval at Ohio State University, Irwin proposed to lift corners of the geometries created by diagonal paths, adding a third dimension to the otherwise two dimensional landscape (Fig 2.2). At the same time, these lifted pieces would provide new opportunities for social gathering and interaction with the site. Through this intervention, Irwin would gently intensify the geometries of the site while also augmenting the social possibilities provided by the space. Speaking of this project, Irwin favored it as one of his best proposals: “The piece was gentle enough not to make any issues about its existence. And it was as close as I’ve been able to get to simple presence… to turn up by only 10 percent what was already going on there.” Even here, although this may be as close to “simple presence” as possible (the proposal was rejected because the dean thought it would not be recognized as art), the intervention is recognized as intentional. Despite the clear absence of a traditional border to the work, the character of the mark generates a different kind of frame. As Irwin’s work is apparent in its creation as an intervention upon the quadrangle, the perception of intentionality frames the project, imparting a significance upon the mark. Through this frame, Irwin’s work begs to be understood, even if it is not understood as art.

If landscape architects or architects are to inject an experiential language into their own narratives, a frame must be utilized in order to stimulate a reading of the site. Given the materiality and goals of landscape design, this proves difficult:
Landscape architects, unlike architects and artists, work with a medium that is also their subject and canvas. This special condition has raised theoretical dilemmas for landscape design since its embryonic stages as a separate discipline from painting or architecture, as evidenced in the nineteenth-century writings of J.C. Loudon and Mariana Van Rensselaer or, more recently, in Mara Miller’s “The Garden as an Art”. These theorists and critics speculated about how one could design with the materials of nature, in the place of nature, and about the content of nature and not have the result be confused for nature itself. How could it be recognized as art? [my emphasis] 15

Landscape design is often tasked with creating ‘mirrors’ of nature, running the risk of confusing the man-made with the results of Nature. In creating places which address nature with the products of nature, there is a danger of losing the perception of intentionality, and thus a frame through which a site may otherwise be understood.

For the landscape architect who wishes to reveal the un-designed work of Nature, another kind of frame must be utilized. While intentionality is often an inherent border to the work of land artists, in their work also lays the opportunity for another type of frame, one which Mary Miss implies in her efforts of “trying to give a place an emotional content.” For example, consider a hypothetical, derelict building set amidst an urban fabric. You pass this building regularly during your commute, perhaps taking note of its missing bricks, crumbling mortar, and windows sealed with plywood. Although you may wonder about its place amongst the community, its dilapidation would most likely go largely unquestioned. If this same building were instead set in a forest through which you are hiking, new perceptions would certainly be stimulated. Questions of the building’s history – the reason for its placement, the cause of its wear, or its indications for the surrounding forest – are brought into focus as well as what might be inferred about the future of the building. In either setting, the building acts as a physical marker of past relationships and a hint for the future, but the availability of the building to be perceived as such is dependent on the setting. The significance is in the fact that the latter setting provides an affective frame different from that offered by the urban community. This frame arises out of the affective qualities produced in each setting. In the first site, the frictionless juxtaposition of the derelict building within an urban setting does not produce any startling qualities which otherwise frame the building in a new manner. In the second site, the building evokes memories of urbanity which are juxtaposed in a surprising way with feelings of tranquility or perhaps exploration in the forest, producing in this case, a frame which incites different understandings of the building. This frame is created from contrasting and adjacent elements which inspire past memories, trigger associations, or incite emotions. In the forest or in the city, there is no intentionality to the building’s role as a manifestation of meaning and process, yet stumbling across the building in the forest stimulates meaning to be sought, relationships to be understood, and processes to be questioned.
Although landscape architects have an opportunity to reveal the ways in which people tie into complex, dynamic processes of Nature, the frame of intentionality cannot be relied upon. The processes which are to be shown are often themselves results of Nature that cannot be said to have any deliberate purpose. In the goal of engaging people with and changing perceptions towards Nature the difference between the perception of intention or chance is not important; the question – “How could it be recognized as art?” – loses its significance. Instead, the question for designers working within the realm of everyday interactions is of how the site builds an affective narrative in order to create a frame which stimulates reflection on Nature.

**Affective Qualities in Fluctuating Landscapes**

Even if intentionality is an inescapable perception of many interventions upon the landscape, the affective frame can still emerge as the primary device in drawing focus towards the inadvertent, multifaceted, and fluctuating characteristics of Nature. The perception of deliberate intervention may generate questions of the purpose of the work in lieu of questions regarding the cause of its physicality and the relationships it expresses. In this regard, Walter De Maria’s *Lightning Field* (1977) is useful in its demonstration of an affective frame working simultaneously with overt intentionality.

This one kilometer by one kilometer section of western New Mexico sets apart and focuses upon several specific, yet invisible aspects of the site. Through the installation of an array of stainless steel poles which reach over 20’ into the air, the artist concentrates lightning as well as the transitioning sunlight of the high desert. The materials have a direct relationship with the forces of the site, which in turn develop a relationship with the viewer. It is through an affective frame, which is developed by the relationship of the materials to the performance of the site as well as the physical layout of the intervention, that the visitor becomes engaged. While walking the site, the entire piece is never visible at once. One must deliberately explore the land in order to gain an understanding of the extent of the intervention. Through this slow revealing, a sense of discovery is gained in the visitor. In the steel poles’ role as a concentrator of ephemeral agents, they too help produce an affective frame by inspiring awe at the grandeur of these...
processes. The movement of both the individual and the invisible forces through the field creates a dynamic and affectively engaging landscape. The intervention makes the invisible visible, but also succeeds in “establishing a dialogue between the artificial space of art and the elements of nature in a work of extraordinary emotional intensity. The question of what is natural and what is artificial loses its absolute meaning. To interrupt the continuity of the natural landscape, amplifying it, becomes an expressive necessity to make the invisible visible.”¹⁶ Here, the processes upon which De Maria wanted to focus would not have been able to be perceived as clearly without the specific use of his intervention. Yet, the ultimate goal is not to understand why the work exists, but to engage the user in what is revealed. The intentionality of the project induces questions regarding the artist’s choice of placement, materiality, and scale, but it is the affective engagement with the land and its forces which stimulate questions of the power of Nature.

Walter De Maria relied primarily on the manifestation and assemblage of latent qualities of the site in the creation of affective content. The existing affective content of a site, however, may also be manipulated in order to achieve a lens for understanding Natural qualities. In West 8’s Swamp Garden, an installation for the 1997 Spoleto Art Festival, the designers defined a space amongst the cypress swamp using a series of steel poles connected with wires upon which they hung

**Fig 2.4** West 8’s Swamp Garden.

**Fig 2.5** Axonometric drawing of West 8’s Swamp Garden.
Spanish moss. The intervention’s “ultra-light, wavy walls [created] an open-air room where changes in light from morning to evening cause constant modulations in atmosphere.” 17 Similar to The Lightning Field, these designers set apart a portion of the landscape to be explored in greater depth. Although the intervention’s materiality does construct an affective frame of seclusion, tranquility, and wonder, this project’s affective content is bolstered by existing perceptions of the cypress swamps. The forest stands on the outskirts of Charleston, upon land once farmed by slaves as rice fields. It presents itself as foreboding, inaccessible, and perhaps frightening. In utilizing this landscape in the narrative created by West 8, they have framed the variable characteristics of the cypress swamp with explicit affective content. Again, intentionality may declare the space, setting it apart, but the introduction of the human visitor and their experience of the space allows the intervention to function as a manipulator of emotions, framing Natural forces in a way that encourages immersion and stimulation of new perceptions towards the landscape.

In both of these cases, the designers did not create landscapes which ‘function’ in traditional ways. The function of these spaces is to create affective experiences which shift perception towards questions of what is apparent in the landscape and how it associates with us. As is implied through this argument, designers are not necessary to the creation of spaces which affectively engage users in dynamic landscapes. Indeed, there are opportunities in our landscapes where affective content has been created without the aid/intentions of a designer, yet emotion still acts as a frame for shifting processes. Un-designed, affective, and fluctuating spaces can also serve as occasions for re-engaging with Nature and glimpsing our place within its complexities. These opportunities may be rare, but it is through their incorporation into the daily interchanges between users and their environments that the goal of altering cultural perceptions of Nature can be achieved.

1 Nevins 1985, p. 103.
2 Evernden 1993, p. 145-146.
3 Ibid, p. 146.
5 Ibid, p. 29.
6 Ibid, p. 29.
8 Treib 1993, p. 268.
9 Nevins 1985, p. 103.
10 Robert Irwin as quoted from his notebooks by Marc Treib; Treib 1993, p. 269.
12 Beardsley 2000, p. 5.
13 Irwin 1993, p. 22.
14 Robert Irwin as quoted from an interview by March Treib; Treib 1993, p. 275.
15 Meyer 2004, p. 204.
16 Galofaro 2003, p. 78.
17 West 8, Swamp Garden.
Part III: Towards a Measurement of Registers

“The dynamic qualities... facilitated unexpected experiences and further reinterpretations that might inculcate a new environmental awareness or perhaps even a new ethic in those who lived, worked, and played in these designed landscapes. Thus, ecological environmental values were not only embodied in the work, but also engendered by it.”

Elizabeth Meyer ¹
Milieu

In order to define an experiential and engaging language for landscape architecture, I will attempt to build the idea of a register – the intersection of dynamic processes and affective qualities which build opportunities for the qualities of the environment and our place within Nature become salient. In doing this, the idea of landscape will need to be pulled apart and from the resultant pieces, the aspects which are utilized in the formation of a register will be identified. Many definitions of landscape exist, but the concept of a register is specifically tooled to reveal a particular understanding of the word. While Nature implies the universe in its unknowable, amorphous reality, landscape is the result of the wild which we come to understand through qualitative experience. Tim Ingold has succinctly stated that landscape “…is not a totality that you or anyone else can look at, it is rather the world in which we stand in taking up a point of view on our surroundings. And it is within the context of this attentive involvement in the landscape that the human imagination gets to work in fashioning ideas about it. For the landscape, to borrow a phrase from Merleau-Ponty, is not so much the object as ‘the homeland of our thoughts.’” ² The landscape is the field from which new understandings are generated and the foundations of new languages and ideas are born.

First, “the world in which we stand” consists of that with which we interact. The physical disposition of the landscape stretches beyond measurement – every entity within the landscape relies upon its relationship to other entities in order to define its physical character. For example, consider the landscape of which I am a part during a walk through the Agriculture Quadrangle on Cornell’s campus. During a single moment of this walk, the physical entities of which I conceive are defined by my perception of them (see Fig 3.2). In this way, the physicality of the landscape consists of networks of relationships binding every entity within it. I will refer to this physical

Fig 3.1 One moment highlighted in the Agriculture Quadrangle
domain as the landscape’s *milieu*. The entities within the milieu are in actuality nodes constructed, for simplicity, by their cultural meaning. The “concrete walk”, for example, may be examined at a smaller scale to reveal that within its construction as a culturally defined entity, it consists of separate entities – gravel, slag, water, fly ash – which all form their own networks of relationships and can be further broken down. Clearly, the milieu can be scaled all the way down to the molecule, but in the use of the milieu to create meaning, the human scale is often sufficient.

During this one moment of my walk, despite the entire milieu being available to my perception, I only sense a limited array of its entities (see Fig. 3.3), yet I can still conceive of other entities that I do not directly interact with. The concrete which I feel under my foot and whose physical character I influence through the shade I provide and the abrasion caused by my movement across its surface, has its own set of relations of which I am only one part. The heat and the glare of the concrete is a *trace* of its association with the sun. I know
of this relationship despite the fact that I do not directly experience it, just its trace. When the milieu is given depth, through temporality, these traces become evidence of the culmination of past relationships flowing out into the future as an indication of the development of the landscape.

The character of the milieu, as a field of perceptions and relationships, means that we cannot truly extract ourselves from its array of interactions. There exists no viewpoint from which we can point and identify our position amongst the landscape. Every moment within the landscape can only truly be known as a culmination of the relationships presented within the milieu – continuously evolving, diminishing, and morphing. Further, it is by means of this full, experiential movement through the landscape that we gain an understanding of the world and the extended connections which compose its physicality.

**Affective Qualities**

In the experience of living within the landscape, we do not just perceive the milieu, but also the intangible sensations which emanate from the landscape. While culture functions through the application of meaning onto the milieu, the milieu is capable of inspiring within us memories, emotions, and expectations. As Walter De Maria inspired awe and exploration around the wild Nature of the desert and West 8 created an environment which built upon past memories, designers are capable of creating and manipulating affective qualities. These qualities arise out of juxtaposed elements which reference prior experiences and stimulate associations and emotions, allowing for the construction of the affective frame.

Eisenman Architect’s *Memorial to the Murdered Jews of Europe* in Berlin clearly focuses on creating meaning through engaging visitors with affective qualities. The memorial consists of an expansive field of stark, concrete columns ranging in height from 1.5’ to 13’. Once
submerged into this hauntingly regular and cold grid, the visitor is disconnected from the urban fabric and hears only their own footsteps echoing through the field of concrete. This landscape not only engages the user with a jarringly disconnected experience, but it also makes use of its materiality and form to rouse emotions tied to past experience. The impartial grid laid out upon the site inspires reflection on the regimental and detached system laid out by the Holocaust. The designer submerges the visitor, juxtaposing the sights, sounds, and freedoms of the urban environment with a constrictive and solitary grid of concrete. The designer, through his intervention, manipulates how the site is interpreted and what sensations are likely to be felt, thus creating an affective frame which transcends the materiality or physical aspects of the site. This frame allows visitors to read the story of the Holocaust – a tragedy most of us have only experienced through the languages of text and film – in a new way, inciting unique understandings and conceptions of its events.

The emergence of these qualities from juxtapositions within the milieu is important in its construction of the affective frame, but neither the qualities nor the frame should not be thought of as static. As with the shifting milieu, landscapes are capable of producing changing affective qualities, creating a series of experiences which can be most potent as a culmination.

**Temporality**

While the landscape’s milieu and its affective qualities have thus far been discussed as slices and single moments, it should be clear that landscape is afforded a depth through temporality. Indeed, temporality is indispensible to the experience of landscape. It is important, however, to distinguish what is meant by time in the landscape. As Tim Ingold elaborates on his definition, the temporality of landscape is not chronology (any rhythmic, regular system of intervals), nor is it just history (a series of events, which are given chronological markers). Just as with the milieu, temporality is immeasurable, known through experience, and cannot be sectioned off.

Whereas temporality in the landscape is fluid, chronology is an imposition. It is pieces of history which gives us the markers for a chronology (for example, biblical events or the rotations of the Earth). Through this cultural instrument, we are able to identify “events” within the unfolding, fluid temporality. In moving through the landscape, however, we are not always aware of the passing of events or demarcations of time (see Fig. 3.1). The ways in which we move through landscape (running, strolling, etc.) as well as the composition of the landscape (physically demanding, startling affective qualities, etc.) influence our perception of temporality. Just as the composition of the milieu changes seamlessly as we move through it, movement through temporality does not get broken up into
frames. At any given moment, I am able to look back at the past in order to reach out into the future – creating a flowing, irregular temporality which cannot be completely defined by any present moment. When we take a slice of the landscape, as we do through the cultural description of historical events, there are still vestiges of temporality, indications of the past as well as projections of the future. One cannot completely sever a moment from its temporality because the temporality of the landscape is a culmination of the past moving relentlessly into the future. In this sense, the temporality of the landscape is also a trajectory. As we perceive its unfolding it is suggesting a direction, hinting at the ways it will develop.

Through this constant flow of time, entities are always in flux, even if it is not on the same temporal scale as our own movements through the landscape. Vegetation, animals, and geologic formations are all shifting – embodying past influences – on different temporal scales. Imagine how any land formation would appear if hundreds of millennia were compressed into a 30 second video clip. Any landscape, when experienced through a compressed temporal scale, can be shown to move fluidly, just as animated by its relationships amongst the milieu as any animal. Although we know of the milieu through perception, the temporality of each of landscape’s agents cannot be understood in a ‘moment’. The relatively small temporal scales of our experience in a site are rarely conducive to understanding the implications of temporality. There are, however, clues within the milieu which help us to jump temporal scales, uncovering an understanding of the shifting quality of landscape.

**Physical Depth**

The physical depth of landscape is the result of landscape’s temporality applied to the milieu. Depth in the physical landscape is gained through a culmination of past relationships and the incorporation of all of its past influences. Here, the traces which I described earlier become more than just acknowledgements of relationships. With the depth of time, traces become ‘crude registers’. They are indications not only of past relationships, but also of the future of the landscape.

Considering the temporality of these entities, we see that they are constantly in motion. Every member of the milieu, animate or inanimate, absorbs the traces of the relationships it holds to other entities. We have a tendency to imagine historical events as perspective images, yet given the quality of the landscape’s milieu and its constant temporality, we know that these images are incomplete representations. Although the past is gone, a sense of it can be regained through the experience of these traces. We see in traces the evidence of relationships once held and how they have changed – consequently hinting to us the direction towards which it
is headed. While the traces themselves are often unpredictable, the importance for designers is of how the depth of these entities can be framed affectively, polishing the ‘crude register’ into a device which engages users in the underlying processes of a site.

Affective Accumulation

Prior understandings manipulate affective experience. Knowledge of past events and present circumstances influence what we predict to happen, how we act, and how we react to our environment. Designers cannot control for the prior experiences and mindsets of visitors, but they can create affective depth within the discovery and reading of their site and through tapping into regional references and site specific knowledge of patterns of use. The depth of affective experience is capable of juxtaposing the variable qualities of a site in order to produce stronger reactions and shifting frames.

The work of Mary Miss strives for the elicitation of specific affective qualities from the milieu, often drawing from local vernacular to inspire connections through time and space while also layering affective experiences. In her 1979 – 1981 outdoor installation, Field Rotation, Miss created a piece which was meant to be read as a discovery – expressing itself over time and allowing for shifts in atmosphere in order to provide a deeper affective frame. In the smoothly contoured topography of University Park, Illinois,

![Fig 3.5 An aerial view of Mary Miss’s Field Rotation.](image)

![Fig 3.6 Field Rotation as approached from the university.](image)
approximately 35 miles south of Chicago, Miss constructed a pinwheel which reached out into the adjacent site and towards the university with spokes of wooden poles. The poles, which were cut level across their tops to contrast with the otherwise imperceptible slope of the site, recalled the local telephone poles and property markers which are prevalent in journeys through this mostly rural region. Visitors were put at ease by this regional reference while being drawn towards the gently elevated source of the radiating lines. Upon reaching the center of this pinwheel and ascending the slight hill, the visitor would look down upon an oddly shaped courtyard embedded into the land.

Confronted with this startling discovery, there is a pull to continue the reading of the site and descend one of the ladders into the wooden courtyard. Contrasting with the vulnerability of the open land from which the visitor descended, this courtyard was secluded from both the aural and visual experience of the surrounding site. At the nucleus of the piece, the journey made its final downward turn into a water-filled well which contained a ladder – an invitation to the dark, mysterious center. This move was the last in an affective accumulation, building upon the qualities of the rest of the landscape as the visitor explored the site. The affective frame produced by this installation, complete with its juxtapositions and layering, is used to develop an understanding of this Midwestern prairie landscape. As Miss states, “The experiences available by moving through the structure and its surroundings are more important than what the structure is in itself.” In creating this deep, fluctuating affective frame, the meaning (as with Eisenman’s memorial) which is brought into focus exceeds the differentiation between that which is artificial and that which is assembled by Nature. The landscape comes together to frame a meaning that can only be understood through experience while eliciting new understandings of the site.

Register

In Eisenman Architect’s Memorial to the Murdered Jews of Europe and Mary Miss’s Field Rotation the landscape’s affective qualities were used to create frames to both engage the user and focus them on the meaning constructed by the landscape. A register, however, utilizes these strategies of stimulating perceptions to frame the dynamic qualities of the landscape and its milieu – allowing glimpses of the wild Nature and the ecological (including human) processes shaping the landscape.

Entities within the milieu are given a rich depth through the embodiment of traces – results of past relationships – over time. Traces, immersed in a fluid temporality, are important in the ways they reveal the formation of an entity and the larger milieu of which it is a part (and at the same time implying future possibilities), a register depends on the affective qualities of the landscape to frame the trace
and stimulate a deeper reading. Through this experience, landscape functions as “the homeland of our thoughts”, allowing the unique experiences of the user to shape new ideas of Nature and life:

…life is ‘a name for what is going on in the generative field within which organic forms are located and “held in place”’. That generative field is constituted by the totality of organism-environment relations, and the activities of organisms are moments of its unfolding. Indeed once we think of the world in this way, as a total movement of becoming which builds itself into the forms we see, and in which each form takes shape in continuous relation to those around it, then the distinction between the animate and the inanimate seems to dissolve.  

In the realization of this landscape, the distinctions between animate and inanimate, art and artifice, intentional and unintentional lose their importance. The register’s usefulness lies in its ability to stimulate a way of thinking which encourages reflection on the impact Nature has on our lives.

Although I focus in this research on constructed registers – the design of frames for understanding the un-designed – it is important to note that registers do not require a designer. As with my experience of Washington Square outlined in the preface, emotive qualities unrelated to the site can still frame new interpretations. In Part IV, I will examine how registers function in the designed landscape – what they reveal, how they frame it, and what opportunities they afford. In doing this, strategies will be uncovered for the implementation of registers through design.

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1 Meyer 2000, p. 204.
2 Ingold 1993, p. 171.
4 Project description from website; Miss, “Projects”.
5 Ingold 1993, p. 164.
Part IV: Testing the Methodology

“‘Here the work exploits the constantly changing conditions of the environment it redesigns to keep it active.’ What is shown is everyday life, offering the observer the opportunity to examine certain details from an unusual vantage point.”

Luca Galofaro ¹
Located on the southern edge of Philadelphia, League Island has been home to the U.S.’s first naval yard for nearly 250 years. Now, as the military begins to vacate the land, the warehouses which once hosted the creation of massive, steel warships are being repurposed to host investors, designers, and researchers. Urban Outfitters is one of the first private sector businesses to breathe new life into the Navy Yard through the transplant of their corporate headquarters from downtown Philadelphia. The corporation made the decision to retrofit a set of existing buildings in the Navy Yard, transforming former smitheries and woodworking shops into offices and amenities for their creative staff. As part of this adaptation, Julie Bargman’s D.I.R.T. Studio was contracted for re-design of the site. In developing a master plan for the new headquarters, the landscape architects designed a space which is not only rich with traces of the past, but uses a narrative to register and reveal this dynamic history of the site to its visitors.

In traveling to the Navy Yard, one must pass through the dead zone of the sports complex (see Fig. 4.1; a01, a02). Home to the separate stadiums of the football, baseball, and hockey teams, this complex consists of imposing buildings floating amidst washes of asphalt parking. The sports complex produces a tension as the space is constructed at a larger scale than the human experience. Large steel gates and restricted access signs provoke memories of institutionalized spaces. Gaining life only at the times of an event in one of these coliseums, at all other times it is a space devoid of pedestrians and devoted to automobile commuters. Whether experienced on foot or in car, this forecourt to the Navy Yard puts the visitor on edge. The land stands unclaimed and in a perpetually deteriorating state with no comforting supplement to its hard sea of pavement.

The gates of the Yard are a welcome marker rising out of the twisted confluence of cars and asphalt. Passing through these gates, however, does little to relax the visitor as they find themselves once again amidst a strange juxtaposition. Naval ships float motionless and daunting in the docks directly across the street from suburban-style houses sitting amidst manicured yards (see Fig. 4.1; b01, b02). While moving through this peculiar situation, the smells and sounds of the sea begin to waft up from the bay. The visitor is steeped in an atmosphere that is drastically different from either the sports complex or Philadelphia’s downtown core to the north. The Yard contains an abundance of well-kept lawns, gardens, and office buildings, yet the presence of the raw and rusting artifacts of the site’s military past produces little sense of comfort. The transition into the Navy Yard keeps visitors wary of the site’s construction as a place for industry and research as opposed to recreation or relaxation.
Fig 4.1 Urban Outfitters Photowalk
Fig 4.2 Urban Outfitters Daily Temporal Scales
Fig 4.3 Urban Outfitters Monthly Temporal Scales
Fig 4.4 Urban Outfitters Lifespan Temporal Scales
Given these surroundings, the landscape architects let their intervention for the Urban Outfitters’ headquarters both build off of this progression and depart from it, assimilating it into their narrative. Complementing the brick and rusted steel prevalent in the reclaimed buildings, the designers defined the space through the re-use of concrete and steel and plantings of birch, multi-stemmed maple, and meadow grass suggestive of young, untamed growth (see Fig. 4.1; c01, c02, c03). These unruly masses of vegetation, however, are put into neatly defined planting areas which build into larger geometries set out by the designer; allowing a visitor to both take part in the post-industrial aesthetic yet take comfort in the refined design. Mingling with this visual experience is the clanging of machinery, the blasts of welding torches, and the roaring of engines radiating from the existing industrial warehouses adjacent to the site. As with the birches and grasses planted within pleasing geometries, the vitality of the Navy Yard’s existing industry is also injected and transformed in Urban Outfitters’ campus. Instead of hard-hat wearing laborers, the site teems with fashion designers dragging carts of clothes and corporate executives carrying steaming coffees.

By the time a visitor reaches and experiences D.I.R.T. Studio’s intervention, expectations are for more abandoned industry and relics of war. Instead, the designers pull the visitor in with hints at a matching aesthetic, yet they create a refined space bustling with life. The re-used materials of the site – steel rails, old concrete decking, rusted I-beams – hold traces of the old industry and are contrasted with the new, post-industrial aesthetic. The old concrete decking, now broken into parts and used as a flagstone paving, is contrasted with cherry trees planted into the rubble – their bright flowers diverging from the rest of the tangled vegetation. Steel rails are used as pedestrian paths, contrasting their rusted surface with the white-collar workers they now transport. A poignant cognizance of the industrial past frames these traces and primes an awareness of the larger temporal scales at which the site operates. Upon experiencing these traces amidst the new life of the corporate campus, a temporal link is established – a link to the time scale at which the site is dynamic and shifting. The designers had the opportunity to frame and register a number of different temporal scales, yet they chose to single out and frame those scales which are most intensely impacting and shaping this landscape (see Fig. 4.2, 4.3, 4.4). Ideas are stimulated of the connection between our experience of the site and the scales at which the site is functioning. The lifespan of the materials of the site are compared with our own lifespan, suggesting the deeper time which shifts and morphs this particular landscape.

The design is capable of registering the impact of human industry through the affective accumulation of the narrative created by moving through the three drastically different areas (see the attached plot). If it were not for this accumulation, the temporal link provided by the traces would not have been read for their full depth – the physical qualities of the intervention would have only been
perceived as an aesthetic or an environmentally motivated re-use of material. Instead, the designers manipulated the affective qualities of the surroundings to showcase the rich dynamism of the site, revealing its history and the ways in which it is inevitably continuing to shift.

*Museum of the Earth; Ithaca, NY – Weiss/Manfredi*

With gorges woven through the fabric of the city, the geological history of Ithaca, New York is inescapable. The town’s strong academic presence has made it a center for research and outreach on the subject. In this tradition, the Paleontological Research Institution and its outreach component, The Museum of the Earth, has taken up the goal of providing “an educational facility that stresses the interdependence of the Earth and its life, fostering greater public understanding of the environment, its history, and its future.” This mission is reflected in the new facilities for the Museum designed by Weiss/Manfredi. The designers create regional references and contrasting atmospheres to frame and reveal the geological time scales that continue to shape this landscape.

Entering the Museum campus, one is immediately presented with precisely sculpted landforms, a swale composed of Illenroc flagstones, and a sweeping meadow of grasses (see Fig. 4.6; a01, a02, a03). The sharply defined mounds that support and conceal visitor parking immediately strikes a connection with the moraines and mountains which shape the topography of the Finger Lakes region. Adjacent to the parking area is a vast meadow which slopes down towards the museum. The meadow, filled with re-introduced native grasses, is another regional reference to the swaths of golden meadows that often stretch across the sloping topography of the region. As one is drawn down towards the museum’s main buildings, it is clear that the geometry of the structures is also referencing a local vernacular. In this case, the buildings’ sharp and opposing slopes rising out of the ground establish a link to the linear and shifting geological shapes found in the exposed limestone of local gorges. While these references and connections establish a cursory association of the site with a narrative of the local geological patterns, this experience alone does not tie the visitor into the larger time scales which the site registers.

The building consists of two structures rising out of the earth, seemingly separated by a plaza on ground level, but in fact connected through a passage on the lower level. The interior of the museum is primarily composed of poured-in-place concrete and aluminum and glass curtain walls. This light materiality welcomes and exploits natural light, which becomes a strong experiential aspect of the
Fig 4.5 The Museum of the Earth Photowalk
Fig 4.6 Museum of the Earth Daily Temporal Scales
Fig 4.7 Museum of the Earth Monthly Temporal Scales
Fig 4.8 Museum of the Earth Geological Temporal Scales
building. The entrance is located in the northern portion of the structure which reaches out of the earth to expose its southern façade to the sun. The bath of sunlight in the entrance is quickly and smoothly contrasted as the visitor moves down a long ramp into the lower level of the building (see Fig. 4.5; c01, c02, c03). Experiencing this submergence of the body and diminishment of natural light adds to the narrative that began with the regional references of the moraines, meadows, and gorges. Physically and mentally linking the visitor into the earth, the experience of the building encourages a reading of the inextricable ties between the building and the ground.

After the visitor explores the entirety of the building, experiencing further manipulation of light and submersion, they must climb back up the ramp and back into the light of the entrance. Walking out into the plaza and looking up at the slope from which one originally descended, attention is drawn towards the large llenroc-veneered swale cut into the site. Seeing this swale with the traces of past storms forming pools in its depressions provides the portion of the narrative which links to a deeper meaning of the site. The relatively small temporal dimension of water’s movement in, on, and through the landscape is juxtaposed closely with regional geological references and a physical experience of moving through the Earth. The intentionality of the sculpted and prominent landscape interventions is immediately available to the visitor, yet their meaning is initially shallow. Through the accumulation of a physical experience within the museum and of the trace of stormwater’s temporal scale, a connection is prompted between the cycles of swater, its movement through the land, and the part it plays in shaping the landscape on a geological scale (see the attached plot). The framing of the relatively small temporal cycles of stormwater, which is more similar to that of the human experience, allows the visitor to link into and gain an understanding of the landscape’s place within a larger scale. Through the framing of a relatable temporal cycle, the site acts cohesively to register the geological time scales which shape this landscape.

Models of Registration

What is revealed in a register is un-designed, yet it is the designed intervention which allows for the expression and disclosure of certain aspects of Nature. To achieve this, the designer must provide for a trace – a physical manifestation of the processes that are to be revealed – and for a frame – the proper mindset for understanding the trace’s layers of meaning.
First, a trace or set of traces is set apart or focused upon by the intervention. In the case of the Urban Outfitters’ campus, the traces (re-used I-beams, old rail lines, re-purposed paving, etc.) are explicitly provided and molded by the designer. The Museum of the Earth uses a more ephemeral trace by designing forms which capture and display stormwater while placing it in a geological context. In both examples, the layers that are revealed speak to large time scales, but traces are capable of telling stories of varying scales. Clearly, all materials are in the process of shifting, some on larger temporal scales than others. The traces which we may instinctively think of as ‘dynamic’ – such as stormwater – are acting on a smaller temporal scale than those materials that we think of as ‘static’ – such as concrete. In the designer’s goals for relaying the narrative of a particular landscape, they may choose to reveal some scales over others. The smaller temporal scale of stormwater at the Museum of the Earth does not leave an exceptionally compelling trace, but the cycles at which it is carried out is more relatable to our experience of a place, thus making its changing character and influences on the landscape more easily accessible when appropriately framed. By comparison, the traces left by the longer processes of industry and development revealed in Urban Outfitters’ campus are successful due to their potency and the fact that they are themselves the result of human experience and action. In this case, they add to an affective frame aiding in their reading and are understandable due to their relation to a human temporal scale. Thus, if the intent is to reveal a process whose magnitude stretches beyond that which we can understand, then the register should utilize a temporal scale relatable to our experience. This is precisely the method employed at the Museum of the Earth in revealing the geological processes at play. As the goal of a register is to reveal ways humans are embedded in Nature, using a process whose dynamism can be easily understood through experience will more easily relate our actions to that of larger processes. While any trace can act as a threshold to deeper layers of meaning; they are simply the entities with which we directly interact, and are only one piece of the larger story of the site.

The second condition for a designed register, the creation of a frame, allows the layers of meaning inherent to a trace to be read. In the sites studied here, the focus is on how traces become framed through affective qualities that arouse emotions or encourage associations with memories. These frames, created and enhanced through an accumulation of affective qualities, inherently tie into the existing or precursory experiences of a visitor. It is the designer’s choice as to how their intervention relates to these prior experiences. In the case of the Urban Outfitters design, D.I.R.T. Studio was conscious of the qualities which arise from the experience that a visitor has in travelling to their site. Although outside of their control, the designers utilized and built upon this experience in creating a transition into their intervention. At the Museum of the Earth, the site’s direct adjacencies were not as rich, and consequently
Weiss/Manfredi sought a broader communal knowledge or experience to tie into. The frequency of geological references in the region ensures that allusions to their forms will be widely understood.

The interpretations encouraged by these frames would have been impossible to convey through narratives created within the strict limits of the project boundaries. Instead, the designers elaborated on experiences gained outside of their sites and exploited them in their own intervention. Without employing these earlier experiences, the Urban Outfitters’ campus would have merely achieved an aesthetic instead of priming the visitor for reading the significance of the traces. The idea of the geological time scale and its pervasive impacts in the landscape could not have been conveyed solely on the Museum’s given site. While the site prepares the individual for linking into the geological time scale, a deeper meaning is conveyed through the experience of forms and visuals that a visitor is likely already familiar with. At either of these case studies, the narratives were of the ubiquity and large scale of the processes being revealed and their affective accumulation reflected these intentions.

John Beardsley describes painters and sculptors as aspiring towards ‘presentness’ and a revealing of their meaning in an instant. This is in part a requirement of the way such works are experienced. Landscape architects and architects, on the other hand, are afforded an opportunity to reveal their meaning through time. At the Museum of the Earth as well as the Urban Outfitters’ campus, the sites are capable of registering within the experience of one visit. Yet, there exists other processes, traces, and affective frames which we might imagine develop over repeat visits. While seemingly less efficient than a register which performs within a matter of minutes or hours, the opportunity is present for creating a much stronger affective frame through the layering of multiple visits and the experience of traces as they shift. Further, by injecting registers that require repeat visits into everyday experiences, the inextricable ties between Nature and our landscapes will become increasingly evident. Designers have successfully incorporated the language and strategies of land artists into landscape architecture and architectural projects, but the tactic can, and should, be pushed further. Currently, these designs remain closely connected with the goal of ‘presentness’, striving to be understood in short visits and experiences. The prospect of developing deeper ties and more powerful frames should be further investigated through the design of spaces which not only take advantage of the daily interactions intrinsic to many of our landscapes, but also instigate user interactions for shaping and evolving the design. Through interactive elements ranging from urban agriculture to moveable site features, public landscapes can engender a meaningful connection to the user through the construction of a frame which takes into account their own interactions and influences on the site. Utilizing such a frame might better showcase the relationship between Nature and the user.
In stimulating reflection on different temporal scales and connections between human action and the greater landscape, registers are capable of promoting a more holistic view of the world – a view which takes note of expressive interactions, of formative processes, and of the metamorphic Nature. The register frames and focuses in on particular dynamic processes, but it is important to not reduce their meaning to simply those processes that are framed. A successful register describes a specific story, yet is unrestrictive enough to allow for interpretation of a larger idea, as with the Museum which speaks of the power of stormwater, but also water’s ability to sculpt the land over millennia and directly influence how we live. These are experiences and realizations that cannot be encapsulated by words, but communicate profound truths in helping us understand our place in the landscape and the wild of Nature.

1 Galofaro 2003, p. 130.
2 Museum of the Earth.
Epilogue

This research represents the beginning of my investigations into the design of the landscape. It has served as an exploration of opportunities for designs to surpass their own aesthetic and physical character – designs which strive to enter into a meaningful conversation with those who experience them. The research acts as a point of departure for future journeys into design discourse, yet it is also just my first steps into this journey. Due to the constraints involved in preparing an undergraduate thesis, this research could be continued and expanded upon in several regards.

The exploration of an affective frame and a narrative created through the experience of a place is only one possible means through which its dynamic qualities might be understood. Beginning with the early land artists, designers have sought to underscore a site’s ephemeral qualities, yet these designers have utilized other methods of engaging users with the site. As some of the first to begin questioning the limits of contemporary culture, the land artists sought a new language with which to engage users and to critique the predominant, object-based language. The answer for engaging users explored in this research was that of the affective frame – a tool which grasps at users who are submerged in a culture of superficiality and instant information. An affective frame must most often break through or somehow disengage people from this culture. It is possible, however, that other forms of dialogue with this cultural language exist – perhaps through working with its instantaneous character instead of directly opposing it.

As I continue investigations into the design of the spaces we inhabit, the theories and research compiled here will be utilized as an overarching purpose and direction. With a culture which fuels consumption and environmental degradation, the goals outlined here provide a framework under which designs might operate – contending with the challenges of contemporary culture in order to stimulate the sort of reflection and understanding which promotes a deep appreciation for the complexity of Nature.
Illustrations

Fig. 0.1: David Zielnicki, 2010.
Part II Image: Mary Miss, 1981.
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Fig. 4.8: David Zielnicki, 2010.
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